Page 1 of 8

APR 2 5 2001

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RAW SEQUENCE LISTING

OK

PATENT APPLICATION: US/09/590,583

DATE: 04/17/2001 TIME: 11:16:27

ATTENT ATTENENTION. 00,03,330,303

Input Set : A:\419c9.app.txt
Output Set: N:\CRF3\04172001\I590583.raw

\* 1.

		<110>						s, To	ony i	٧.							•	A A	-
	4				Steve		•											E18	l
	5				Johr		_												
	6				, Lir														~
	7				, Dav													_	>
	8				, Maı		•												
	9			-	Aijur														
	10				, Yas				<b>1</b> 000		10 33		amri Ar	C EC	וח מו	1 E7			
		<120>											STHUL	)5 FC	JR II	10			
	13				Y ANI						CAI	NCER							
		<130>									,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	-00 -	-02						
C>	18	<140>	CUI	RREN	I API	LICE	ATION	NUN P	ABEK:	: 05/	(09/:	90,:	083						
		<141>								0-00	•								
		<160>								1	7000		2 0						
		<170>					SEQ 1	or v	ATUG	JWS (	ersi	LOII	5.0						
		<210>																	
		<211>				,													
		<212>				Iomo	a 2 m	ion											
		<213>					sap.	ren											
		<400>					-a +:	a + + /	7002		t	ttat	caac	rt aas	agg (	raga:	actttt	60	
	32 33	clay	ayad	500 d	aaccy	,yya	30 C	at a a t	gygai	- 2++	cade	nan	ctac	CCAC	י פפי	accta	ataaac	120	
		++a+	att	200	zazti	70220	rt co	at coa	-999	r cat	rate	ragt	cace	agga	art o	7+++1	ttagag	180	
	35	cago	toca	agg (	-gaci	-yaay	ים מי	1+++2	*999:	o cat	+++	TACC	tage	agge	age (	gαaaa	aatagc	240	
	36	cato	retet	tta :	1990 1+++	racat	-9 90 -+ +0	ataaa	rtcac	a ace	acco	ccaq	atac	rtaaa	aag (	raaa	ctccaa	300	
	37	aaac	taga	ann o	ratti	tact	ta a	aataa	aatao	e cac	rtcac	actt	ttac	ragat	tag (	cctaa	aaaggt	360	
	38	ttt	cugi	*99 :	ga c c .		- 5 5.	,			,	,		, ,			,,,	363	
		<210>	SEC	מד כ	NO:	2													
		<211>	-	_															
		<212>																	
		<213>				omo	sap	ien											
		<400>					-												
	46	Leu					Gly	Pro	Asn	Trp	Asp	Pro	Asn	Phe	Ser	Ser	Gly		
	47	1				5	_				10					15			
	48	Gly	Arg	Thr	Phe	Asp	Asp	Phe	His	Arg	Tyr	Leu	Leu	Val	Gly	Ile	Gln		
	49	_	_		20					25					30				
	50	Gly	Ala	Ala	Gln	Lys	Pro	Ile	Asn	Leu	Ser	Lys	Ala	Ile	Glu	Val	Val		
	51			35					40					45					
	52	Gln	Gly	His	Asp	Glu	Ser	Pro	Gly	Val	Phe	Leu	Glu	His	Leu	Gln	Glu		
	53		50					55					60						
	54	Ala	Tyr	Arg	Ile	Tyr	Thr	Pro	Phe	Asp	Leu		Ala	Pro	Glu	Asn			
	55	65					70					75			_	_	80		
	56	His	Ala	Leu	Asn		Ala	Phe	Val	Ala		Ala	Ala	Pro	Asp		Lys		
	57					85					90	_	_		_	95	_		
	58	Arg	Lys	Leu		Lys	Leu	Glu	Gly		Cys	Trp	Asn	GLu		GIn	ser		
	59	_			100	_	_	_		105					110				

ENTERED

60 Ala Phe Arg Asp Ser Leu Lys Gly Phe

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/590,583

DATE: 04/17/2001 TIME: 11:16:27

Input Set : A:\419c9.app.txt
Output Set: N:\CRF3\04172001\I590583.raw

	61	11:	5	120								
	63	<210> SEQ II	D NO: 3									
	64	<211> LENGT	н: 1080									
	65	<212> TYPE:	DNA									
	66	<213> ORGAN	3> ORGANISM: Homo sapien									
	68	<220> FEATU	RE:									
	69	<221> NAME/	KEY: misc_fe	eature								
	70 <222> LOCATION: (1)(1080)											
	71 <223> OTHER INFORMATION: $n = A, T, C \text{ or } G$											
	73	<400> SEQUE	NCE: 3									
	74	tcttagaatc	ttcatacccc	gaactcttgg	gaaaacttta	atcagtcacc	tacagtctac	60				
	75	cacccattta	ggaggagcaa	agctacctca	gctcctccgg	agccgtttta	agatccccca	120				
	76	tcttcaaagc	ctaacagatc	aagcagctct	ccggtgcaca	acctgcgccc	aggtaaatgc	180				
	77			gcccaggcca	-	-		240				
	78		-	aagtaaaacc			-	300				
	79		_	gatggactga	-	_	_	360				
	80		-	tcaatgaaat	_			420				
	81			ccttcgcctt		-		480				
	82			attgtgccta		, ,,,		540				
	83			acactcttac				600				
	84		_	ccctacttag				660				
W>			_	ntttnggaag				720				
W>				ncaactaatt	_	_		780				
W>			-	aaggaaccat				840				
W>			_	tttttnttaa		_		900				
W>				cggccnaagn		-		960				
W>				tngttccngg taaaaaccac		-		1020 1080				
W>		<210> SEQ II		Ladadaccac	miccimicci	LLCLLaaaca	aaacccintt	1000				
		<211> SEQ 11 21										
		<211> EENGII <212> TYPE:										
		<213> ORGANI		nien								
		<220> FEATUR										
		<221> NAME/E		ature								
		<222> LOCAT										
		<223> OTHER			C or G							
	103	<400> SEQUE	ENCE: 4									
	104	tctagagctg	gegeetggate	ccgccacagt	gaggagacct	gaagaccaga	gaaaacacag	60				
	105	caagtaggco	ctttaaacta	ctcacctgtg	ttgtcttcta	atttattctg	ttttattttg	120				
	106	tttccatcat	tttaaggggt	taaaatcatc	ttgttcagac	ctcagcatat	aaaatgaccc	180				
	107	atctgtagad	ctcaggctcc	aaccataccc	caagagttgt	: ctggttttgt	ttaaattact	240				
	108	, ,,					agtagtttcc	300				
	109	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		-			agaaaaacat	360				
	110				-		tctaccccta	420				
	111	, ,		-	-		ctgccatttc	480				
	112	-	_		-	-	ttgaagaagt	540				
W>		-		-			ctnnttttt	600				
W>				-			tctccgctnc	660				
W>	112	cutgcaanaa	i inetgentee	caaaattacc	ncctttttcc	cacctccacc	ccnnggaatt	720				

DATE: 04/17/2001 RAW SEQUENCE LISTING TIME: 11:16:27 PATENT APPLICATION: US/09/590,583

Input Set : A:\419c9.app.txt
Output Set: N:\CRF3\04172001\I590583.raw

			700						
M>	116	acctggaatt anaggccccc ncccccccc cggctaattt gtttttgttt ttagtaaaaa	780						
M>	117	acgggtttcc tgttttagtt aggatggccc anntctgacc centnatent eccectenge	840						
M>	118	cctcnaatnt tnggnntang gcttaccccc cccngnngtt tttcctccat tnaaattttc	900						
M>	119	tntggantct tgaatnncgg gttttccctt ttaaaccnat ttttttttn nnncccccan	960 1020						
M>	120	tttncctcc cccntntnta angggggttt cccaancegg gtccncccc angtccccaa	1020						
M>	121		1080						
M>			1087						
		<210> SEQ ID NO: 5							
		<211> LENGTH: 1010							
	126 <212> TYPE: DNA								
	127 <213> ORGANISM: Homo sapien								
	129 <220> FEATURE:								
		<221> NAME/KEY: misc_feature							
		<222> LOCATION: (1)(1010) /							
		<223> OTHER INFORMATION: n = A,T,C or G							
		<pre>&lt;400&gt; SEQUENCE: 5  tctagaccaa gaaatgggag gattttagag tgactgatga tttctctatc atctgcagtt</pre>	60						
	135 136		120						
	137		180						
	138		240						
	139		300						
W>			360						
M>			420						
W>			480						
W>			540						
W>		aatqtccccn gaaccctctc cntnctgccc aaaacctacc taaattnctc nctangnntt	600						
W>	145	ttcttggtgt tncttttcaa aggtnacctt ncctgttcan ncccnacnaa aatttnttcc	660						
W>	146	ntatnntggn cccnnaaaaa nnnatcnncc cnaattgccc gaattggttn ggtttttcct	720						
W>	147	nctgggggaa accetttaaa tttccccctt ggccggcccc cetttttcc cccctttnga	780						
W>	148	aggcaggngg ttcttcccga acttccaatt ncaacageen tgcccattgn tgaaaceett	840						
W>	149	ttcctaaaat taaaaaatan ccggttnngg nnggcctctt tcccctccng gngggnngng	900						
M>	150		960						
M>			1010						
		<210> SEQ ID NO: 6							
		<211> LENGTH: 950							
		<212> TYPE: DNA							
		<213> ORGANISM: Homo sapien							
		<220> FEATURE:							
		<pre>&lt;221&gt; NAME/KEY: misc_feature </pre>							
	160 <222> LOCATION: $(1) \dots (950)$ /								
		161 <223> OTHER INFORMATION: n = A,T,C or G 163 <400> SEQUENCE: 6							
	164		60						
	165		120						
	166		180						
W>			240						
W>			300						
W>		tnntccttnc tennnnnnn enntenntee nnettetene ennntnttnt ennenneenn	360						
W>			420						

RAW SEQUENCE LISTING

DATE: 04/17/2001 TIME: 11:16:27 PATENT APPLICATION: US/09/590,583

Input Set : A:\419c9.app.txt
Output Set: N:\CRF3\04172001\I590583.raw

			480					
M>	171	conntacnte ntnnnennnt centetntnn cetennennt enetnenent tnteteeten	480 540					
M>		ntnnnnnct communicat entenennen thectennin neeneneece neetenenne	600					
M>		ctnntttnnn cnncnnntcc ntncentten nntcenntnn ennentenen nnenttntte	660					
M>		concentte ettnementn nnntntennn enentennte ntttneteet nnntecenne	720					
M>		tennttence ennnteence eccencetnt etetenceen nntnnntntn nnnenteenc	780					
M>		tntenentte ntenntnent tnetntenne nnenntnene tneentntnt etnnntenen	840					
M>		tenentnten centeentin etnieteetn tnieetteee eteneetnet eniteneene	900					
M>			950					
M>			,,,,					
		<210> SEQ ID NO: 7						
		2 <211> LENGTH: 1086						
		3 <212> TYPE: DNA						
	184 <213> ORGANISM: Homo sapien 186 <220> FEATURE:							
		<pre>&lt;221&gt; NAME/KEY: misc_feature ,</pre>						
		<222> LOCATION: (1)(1086)						
		<223> OTHER INFORMATION: n = A,T,C or G						
		<400> SEOUENCE: 7						
,	192		60					
	193		120					
	194		180					
	195	cacagagaca tgtgctgtgt tgactcaagg ttcaatggat ttagggctat gctttgttaa	240					
	196	aaaagtgctt gaagataata tgcttgttaa aagtcatcac cattctctaa tctcaagtac	300					
	197	ccagggacac aatacactgc ggaaggccgc agggacctct gtctaggaaa gccaggtatt	360					
	198	qtccaaqatt tctccccatg tgatagcctg agatatggcc tcatgggaag ggtaagacct	420					
	199	qactqtcccc caqcccgaca tcccccaqcc cgacatcccc cagcccgaca cccgaaaaagg	480					
W>	200	gtctgtgctg aggaagatta ntaaaagagg aaggctcttt gcattgaagt aagaagaagg	540					
	201		600					
	202		660					
M>	203	atactgctct ttaatgcacg agatgtttgt ntaattgcca tccagggcca ncccctttcc	720					
M>	204		780					
M>	205		840 900					
M>		tccaaaacnt tttcccgttg gtcccctttc caaccccgtc cctgggccnn tttcctcccc	960					
M>			1020					
M>			1020					
M>			1086					
M>			1000					
		<210> SEQ ID NO: 8 <211> LENGTH: 1177						
		<212> TYPE: DNA						
	215 <213> ORGANISM: Homo sapien 217 <220> FEATURE:							
		<pre>&lt;221&gt; NAME/KEY: misc_feature</pre>						
		<222> LOCATION: (1)(1177)						
		<223> OTHER INFORMATION: n = A,T,C or G						
		<400> SEQUENCE: 8						
W>			60					
	224		120					
	225		180					

RAW SEQUENCE LISTING DATE: 04/17/2001 PATENT APPLICATION: US/09/590,583 TIME: 11:16:27

Input Set : A:\419c9.app.txt

Output Set: N:\CRF3\04172001\I590583.raw

	226	- 4 - 4			<b>.</b>		-+-+	240
	226			ctactgaaac		•		
M>				tgttcacaga				300
W>				ccaaggagac				360
M>				ctgaattgat				<b>420</b> 480
	230	222	•	gacagcaggt				
W>				ctactcactc				540
M>				tgttgcccgt				600
M>			-	tenenectet	_	-		660
W>			_	cccatactca			_	720
M>				tnggtnganc		_		780
W>				ccttatcnat				840
M>				tttnncccc				900
W>				ttatcncctg	-		-	960
M>		_		naaatttgca				1020
M>			_	cccctttta		_		1080
W>				cttngaacca		aancacccgc	nggggaacgg	1140
W>				ctttntgtng	gngggnc			1177
		<210> SEQ II						
		<211> LENGTI			*			
		<212> TYPE:						
		<213> ORGANI		apien				
		<220> FEATUR						
		<221> NAME/I	_					
		<222> LOCATI			7 am G			
		<223> OTHER		n: n = A, T, C	Or G			
T.7 &		<400> SEQUE		***	+-++++-		-++	60
W>	256			ttttggcctc				120
	257			gttgacagtc aagcctgggg				180
	258	_				•		240
	259			tagaaagaag gcctctctca				300
W>								360
W>	261			<pre>atgggtgatg ggctggtttt</pre>				420
	262			agtacagggc				480
	263			accttggaag				540
	264			caaactcagc	_			600
	265		-	caacccgcca	_			660
W>				tccaactttg				720
W>			_	cntantccct	-			780
W>				caggctggaa		-		840
W>				aattcncccc	-			900
W>				accaaaaaac				960
W>				tnaagccccc				1020
W>				ttcccancna	-		_	1020
W>				tccnnaaaaa		_		1140
W>		atagan	aaaccatttt	ccomiaaaaa	necegnengg	ngggaaaaan	accumicati	1146
<b>71</b> — <b>- 7</b>		<210> SEO II	NO 10					1140
		<211> LENGTH						
	277	12112 DENGII	545					



## Please Note:

278 <212> TYPE: DNA

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

VERIFICATION SUMMARY

DATE: 04/17/2001 TIME: 11:16:28

PATENT APPLICATION: US/09/590,583

Input Set : A:\419c9.app.txt

Output Set: N:\CRF3\04172001\I590583.raw

```
L:18 M:270 C: Current Application Number differs, Wrong Format
L:85 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3
L:86 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3
L:87 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3
L:88 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3
L:89~M:341~W:~(46)~"n" or "Xaa" used, for SEQ ID#:3
L:90 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3
L:91 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3
L:113 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4
L:114 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4
L:115 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4
L:116\ M:341\ W: (46) "n" or "Xaa" used, for SEQ ID#:4
L:117 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4
L:118 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4
L:119 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4
L:120 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4
L:121 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4
L:122 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4
L:140 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5
L:141 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5
L:142 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5
L:143 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5
L\!:\!144 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5
L\!:\!145 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5
L\!:\!146 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5
L:147 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5
L:148 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5
L:149 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5
L:150 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5
L:151 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5
L:167 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6
L:168 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6
L:169 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6
L:170 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6
L:171 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6
L:172 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6
L:173 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6
L:174 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6
L:175 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6
L:176 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6
L:177 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6
L:178 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6
L:179 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6
L:200 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7
L:203 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7
L:204 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7
L:205 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7
L:206 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7
```

VERIFICATION SUMMARY

DATE: 04/17/2001

PATENT APPLICATION: US/09/590,583

TIME: 11:16:28

Input Set : A:\419c9.app.txt

Output Set: N:\CRF3\04172001\1590583.raw

L:207 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7
L:208 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7
L:209 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7
L:5725 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:322

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